



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/533,094

05/23/2005

Jens Christoph Thies

4676-955

2304

23117

7590

06/27/2008

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

SPEER, TIMOTHY M

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

06/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,094	Applicant(s) THIES ET AL.	
	Examiner TIMOTHY M. SPEER	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,10,11 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,10,11 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/11/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 04/11/08 has been considered and made of record.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-6, 10, 11, and 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneko (EP 1 146 093).
4. Kaneko teaches hard coat materials comprising nanoparticles dispersed in a polymeric matrix (abstract, for instance). The nanoparticles may be present within the range recited in instant claim 6 (paragraph [0040]). Regarding the presently claimed hardness and scratch resistance, since the materials of Kaneko are the same as those recited in the present claims, it is the Examiner's position that the articles will exhibit the claimed properties. With respect to the recited ridge height and separation, since the nanoparticles of Kaneko are the same dimensions as recited in the instant specification, it is the Examiner's position that the articles of Kaneko will exhibit the claimed physical properties; these properties are merely the result of the distribution of the particles in the matrix. Similarly, the physical properties recited in claims 3-5, 10, 11, and 21-25 are considered to be inherent in Kaneko, since the materials of Kaneko meet the compositional limitations of the present claims.

Art Unit: 1794

5. Claims 1, 3-6, 10, 11, and 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Barth (US 2002/0090507).

6. Barth teaches composite films comprises nanoparticles, e.g., ATO or ITO, dispersed in a polymeric matrix (abstract). Suitable polymers include acrylics, epoxies and urethanes, as disclosed in the subject specification. The nanoparticles may be present in a range of from 30-60 wt. %, thus meeting the limitation of claim 6. Since the materials of Barth are the same as those disclosed in the specification and recited in the present claims, it is the Examiner's position that the various physical properties recited in the present claims, e.g., hardness and scratch resistance, will inherently be present in Barth.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3-6, 10, 11, and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko (EP 1 146 093).

9. Kaneko teaches hard coat materials comprising nanoparticles dispersed in a polymeric matrix (abstract, for instance). The nanoparticles may be present within the range recited in instant claim 6 (paragraph [0040]). With respect to the recited ridge height and separation, since the nanoparticles of Kaneko are the same dimensions as recited in the instant specification, it is the Examiner's position that the articles of Kaneko will exhibit the claimed physical properties; these properties are merely the result of the distribution of the particles in the matrix.

Art Unit: 1794

10. Kaneko fails explicitly to teach the claimed hardness and scratch resistance. However, since Kaneko teaches that the coating disclosed therein are used as hardcoats, it would have been obvious to one having ordinary skill in the art to select materials having physical characteristics suitable for a particular intended use. Accordingly, the present claims are considered to be prima facie obvious in view of Kaneko.

11. Claims 1, 3-6, 10, 11, and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barth (US 2002/0090507).

12. Barth teaches composite films comprises nanoparticles, e.g., ATO or ITO, dispersed in a polymeric matrix (abstract). Suitable polymers include acrylics, epoxies and urethanes, as disclosed in the subject specification. The nanoparticles may be present in a range of from 30-60 wt. %, thus meeting the limitation of claim 6. Although Barth fails expressly to teach the presently claimed hardness or scratch resistance, it would have been obvious to one having ordinary skill in the art to select materials having physical characteristics suitable for a particular intended use. Accordingly, the present claims are considered to be prima facie obvious in view of Barth.

Conclusion

13. Applicant's arguments filed 04/11/08 have been considered but are moot in view of the new ground(s) of rejection.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY M. SPEER whose telephone number is (571)272-8385. The examiner can normally be reached on M-F.

Art Unit: 1794

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith D. Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy M. Speer/
Primary Examiner
Art Unit 1794